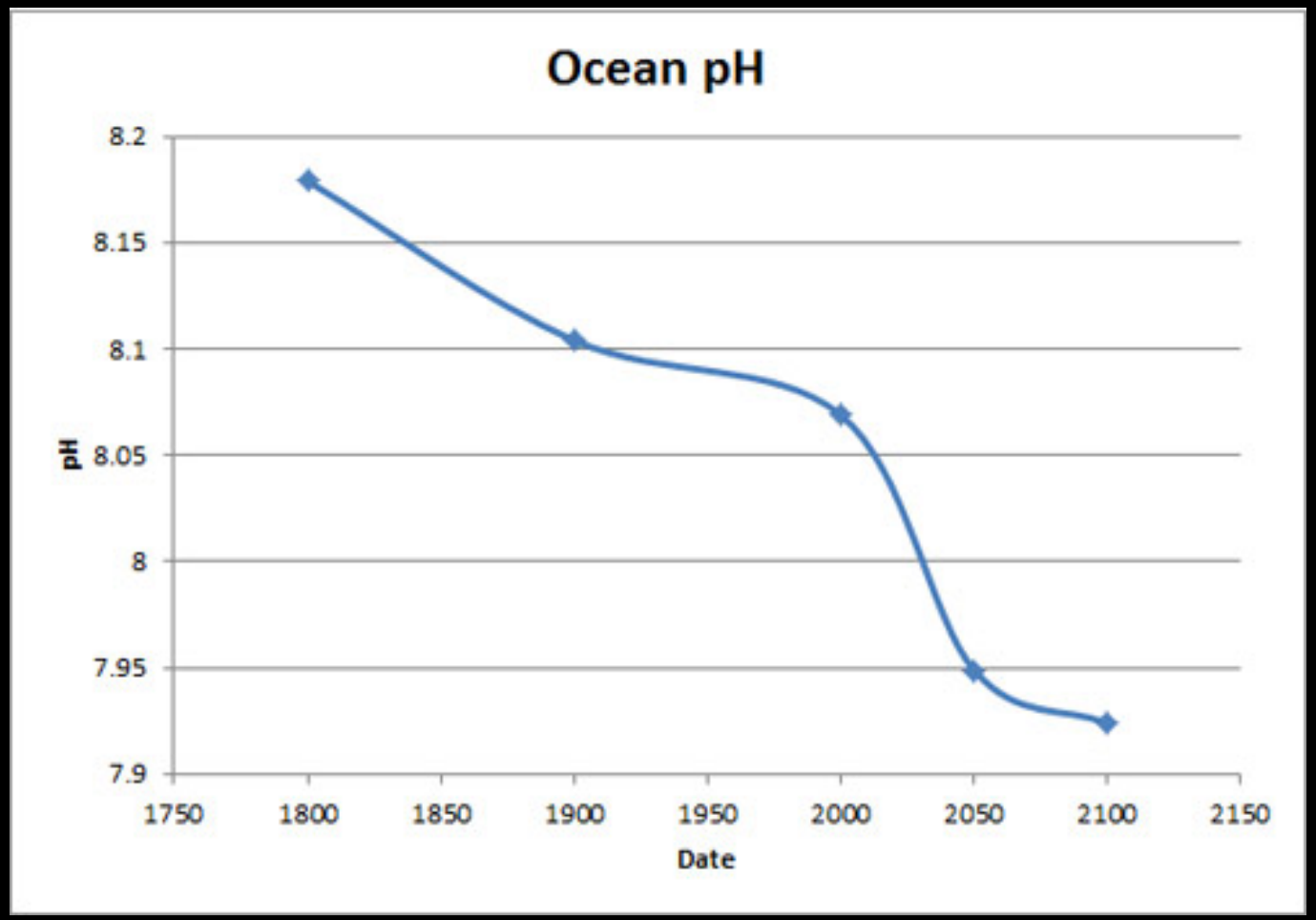
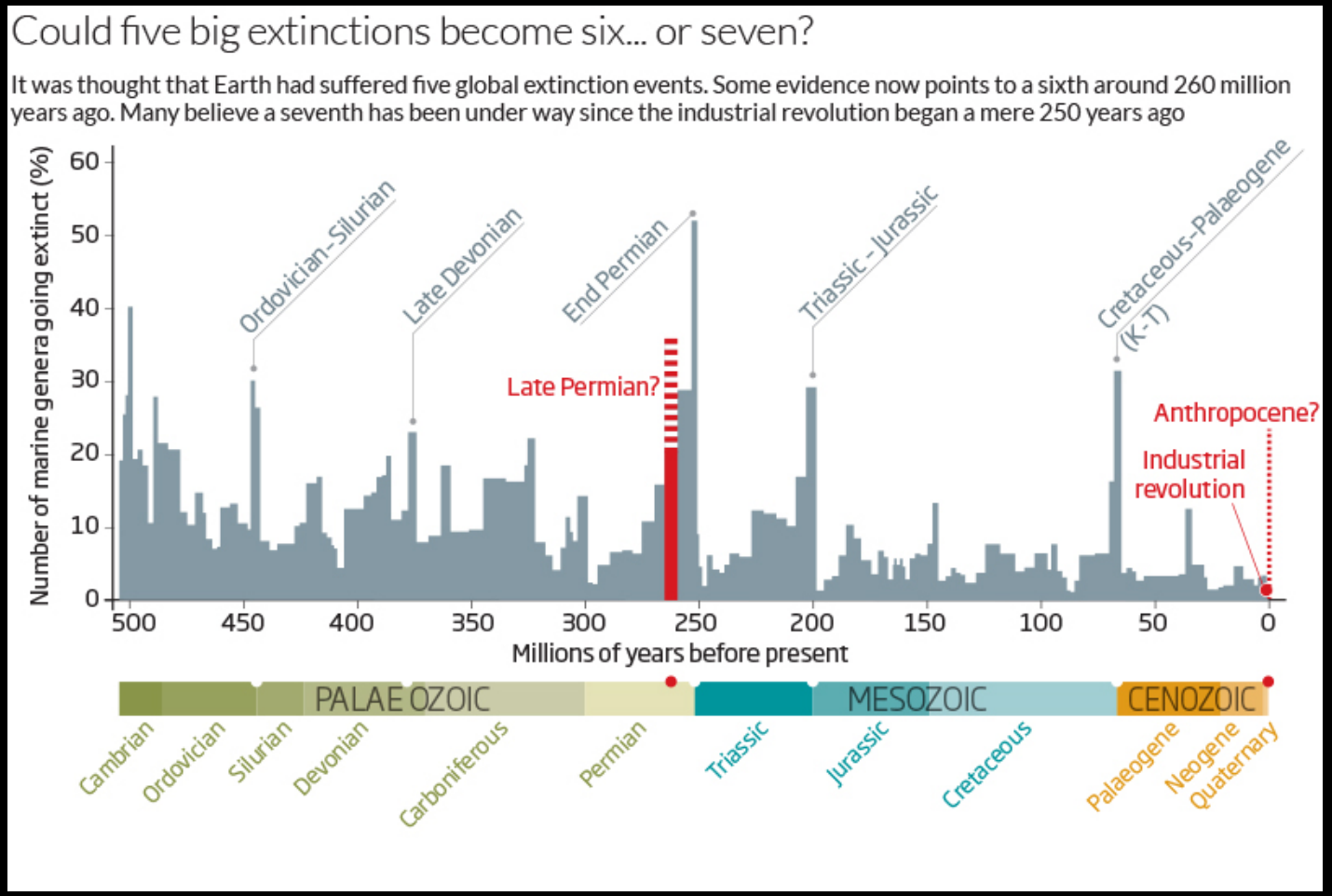
Sýrustig úthafanna



Útþurrkunarskeið



The scientific consensus in the IPCC Fourth Assessment Report is that

> "Anthropogenic warming could lead to some impacts that are abrupt or irreversible, depending upon the rate and magnitude of the climate change."
>
> "There is medium confidence that approximately 20-30% of species assessed so far are likely to be at increased risk of extinction if increases in global average warming exceed 1.5-2.5 °C (relative to 1980-1999). As global average temperature increase exceeds about 3.5 °C, model projections suggest significant extinctions (40-70% of species assessed) around the globe."

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Science 30 May 2014:
Vol. 344 no. 6187
DOI: 10.1126/science.1246752

REVIEW

The biodiversity of species and their rates of extinction, distribution, and protection

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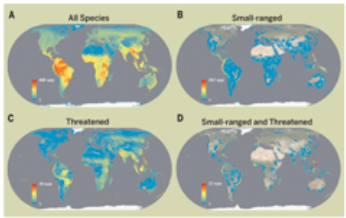
Background

A principal function of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) is to "perform regular and timely assessments of knowledge on biodiversity." In December 2013, its second plenary session approved a program to begin a global assessment in 2015. The Convention on Biological Diversity (CBD) and five other biodiversity-related conventions have adopted IPBES as their science-policy interface, so these assessments will be important in evaluating progress toward the CBD's Aichi Targets of the Strategic Plan for Biodiversity 2011-2020. As a contribution toward such assessment, we review the biodiversity of eukaryote species and their extinction rates, distributions, and protection. We document what we know, how it likely differs from what we do not, and how these differences affect biodiversity statistics. Interestingly, several targets explicitly mention "known species"—a strong, if implicit, statement of incomplete knowledge. We start by asking how many species are known and how many remain undescribed. We then consider by how much human actions inflate extinction rates. Much depends on where species are, because different biomes contain different numbers of species of different susceptibilities. Biomes also suffer different levels of damage and have unequal levels of protection. How extinction rates will change depends on how and where threats expand and whether greater protection counters them.



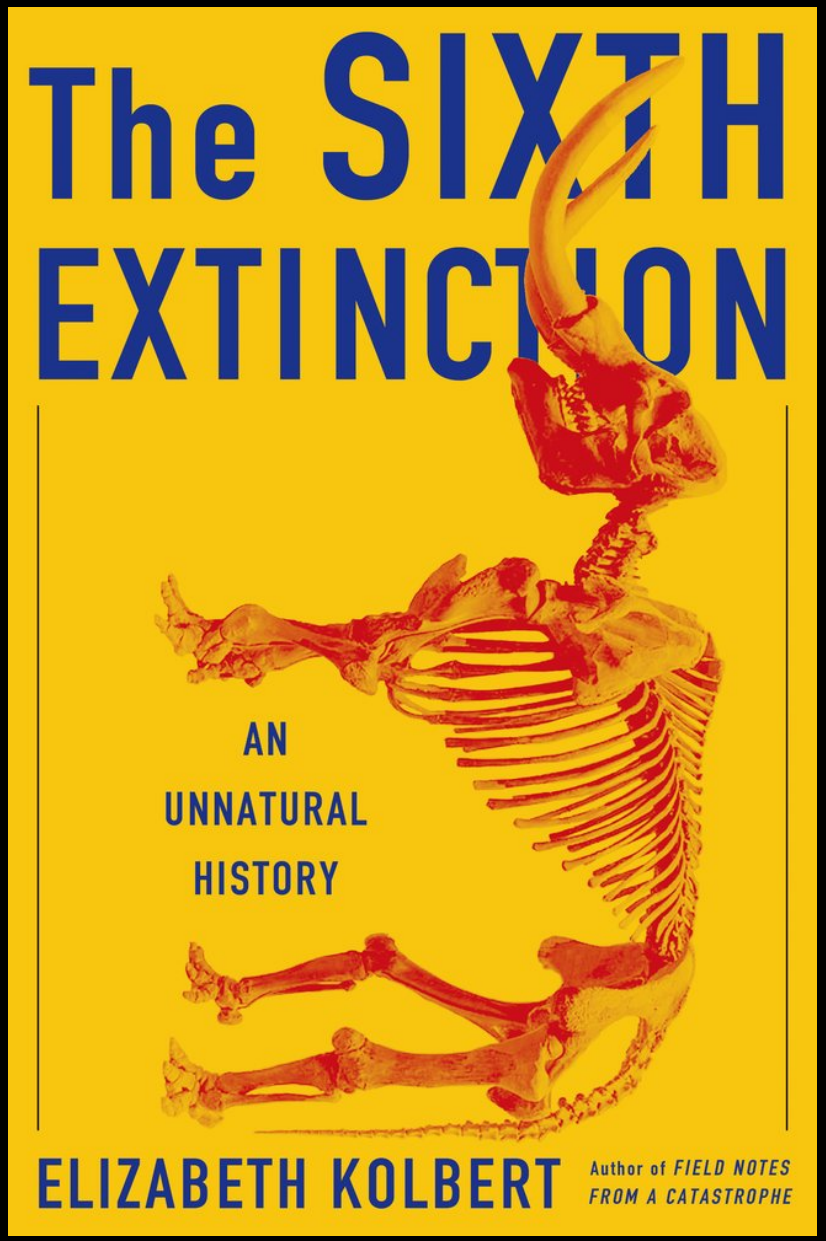
Different visualizations of species biodiversity. (**A**) The distributions of 9927 bird species. (**B**) The 4964 species with smaller than the median geographical range size. (**C**) The 1308 species assessed as threatened with a high risk of extinction by BirdLife International for the Red List of Threatened Species of the International Union for Conservation of Nature. (**D**) The 1080 threatened species with less than the median range size. (D) provides a strong geographical focus on where local conservation actions can have the greatest global impact. Additional biodiversity maps are available at www.biodiversitymapping.org.

Advances

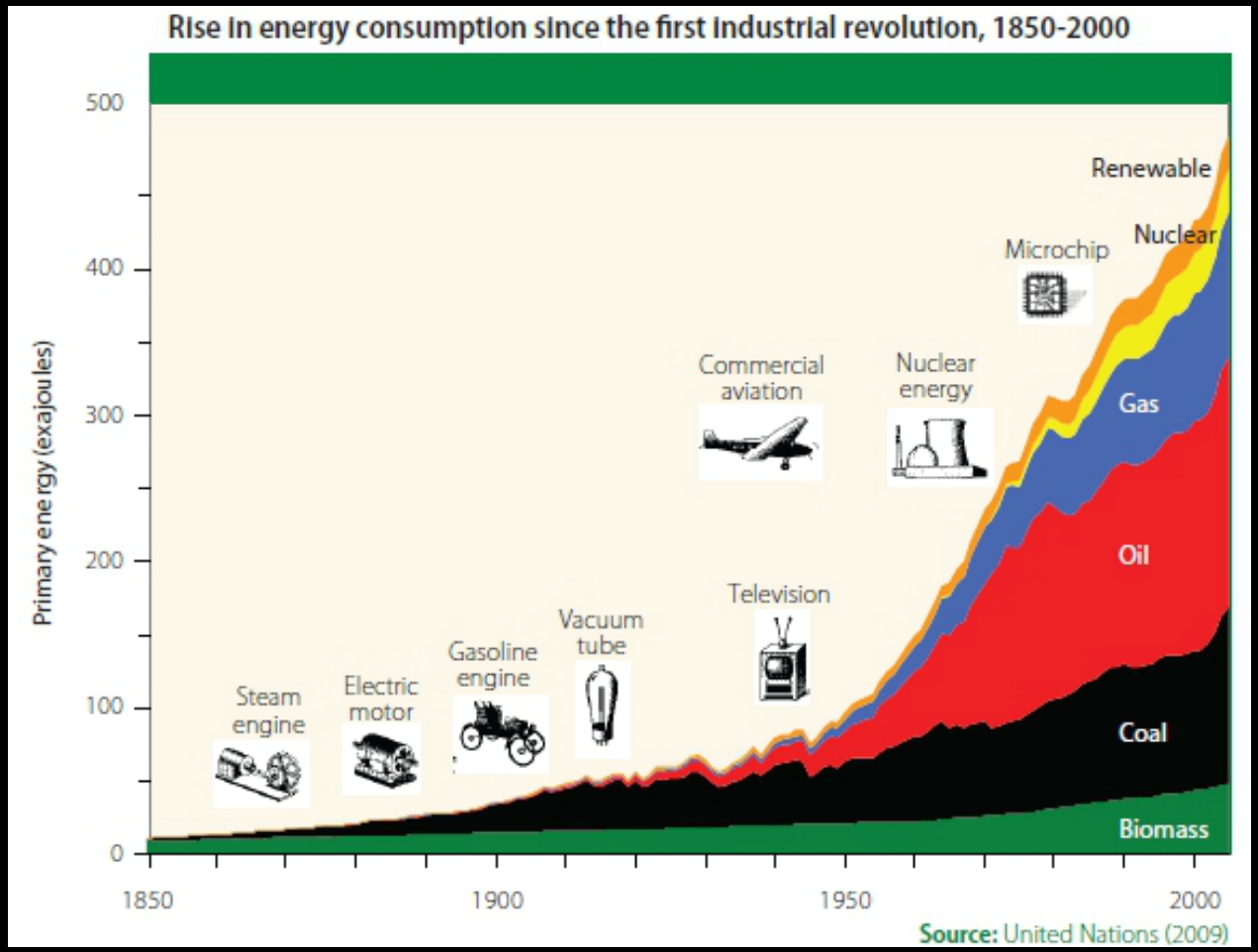
Recent studies have clarified where the most vulnerable species live, where and how humanity changes the planet, and how this drives extinctions. These data are increasingly accessible, bringing greater transparency to science and governance. Taxonomic catalogs of plants, terrestrial vertebrates, freshwater fish, and some marine taxa are sufficient to assess their status and the limitations of our knowledge. Most species are undescribed, however. The species we know best have large geographical ranges and are often common within them. Most known species have small ranges, however, and such species are typically newer discoveries. The numbers of known species with very small ranges are increasing quickly, even in well-known taxa. They are geographically concentrated and are disproportionately likely to be threatened or already extinct. We expect unknown species to share these characteristics. Current rates of extinction are about 1000 times the background rate of extinction. These are higher than previously estimated and likely still underestimated. Future rates will depend on many factors and are poised to increase. Finally, although there has been rapid progress in developing protected areas, such efforts are not ecologically representative, nor do they optimally protect biodiversity.

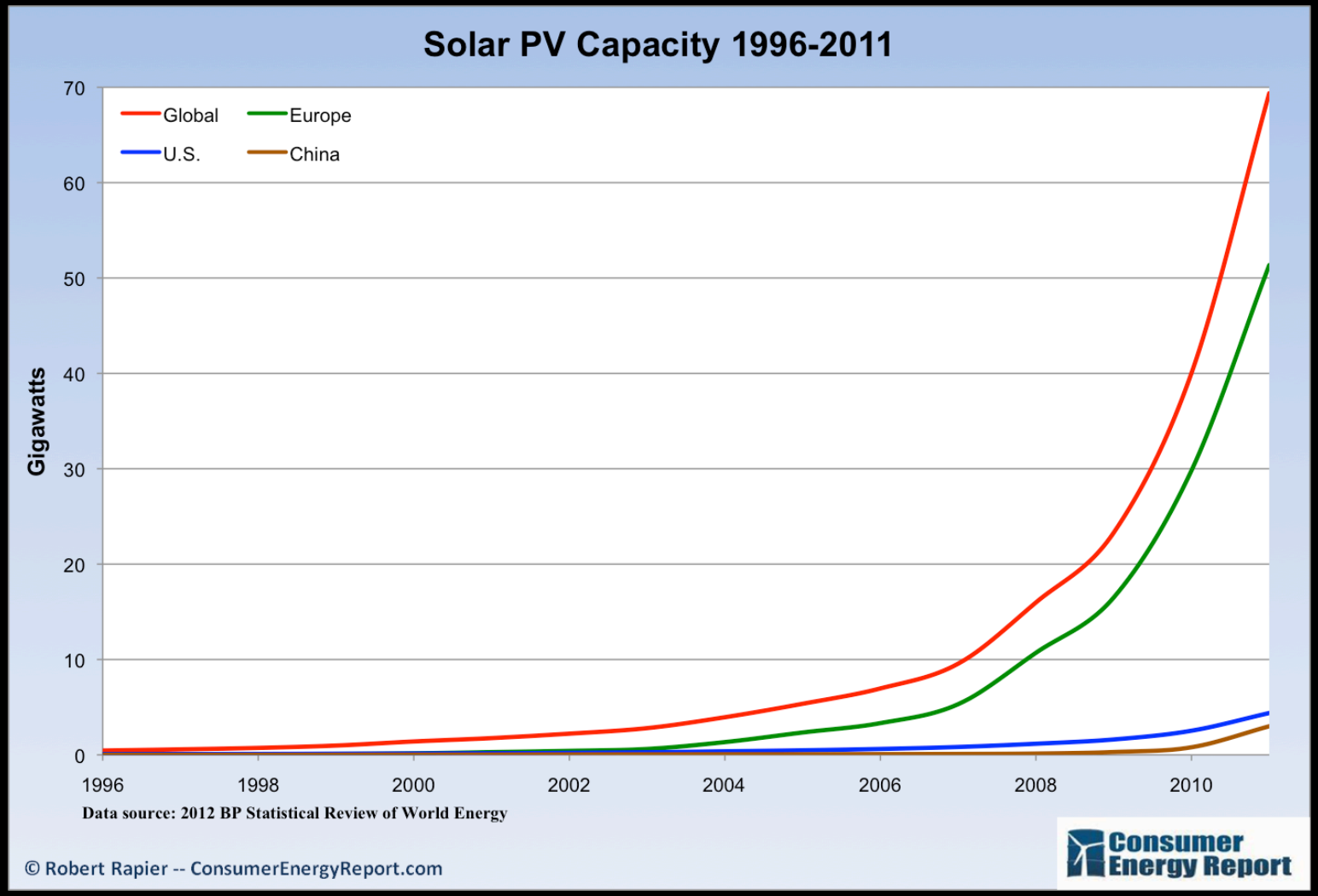
Outlook

Progress on assessing biodiversity will emerge from continued expansion of the many recently created online databases, combining them with new global data sources on changing land and ocean use and with increasingly crowdsourced data on species' distributions. Examples of practical conservation that follow from using combined data in Colombia and Brazil can be found at www.savingspecies.org and www.youtube.com/watch?v=R3zjeJW2NVk.


The SIXTH EXTINCTION
AN UNNATURAL HISTORY
ELIZABETH KOLBERT
Author of FIELD NOTES FROM A CATASTROPHE

Orkunotkun tvöfaldast á hverjum 39 árum




Solar PV Capacity 1996-2011
Gigawatts
70
60
50
40
30
20
10
0
Global
Europe
U.S.
China
1996
1998
2000
2002
2004
2006
2008
2010
Data source: 2012 BP Statistical Review of World Energy
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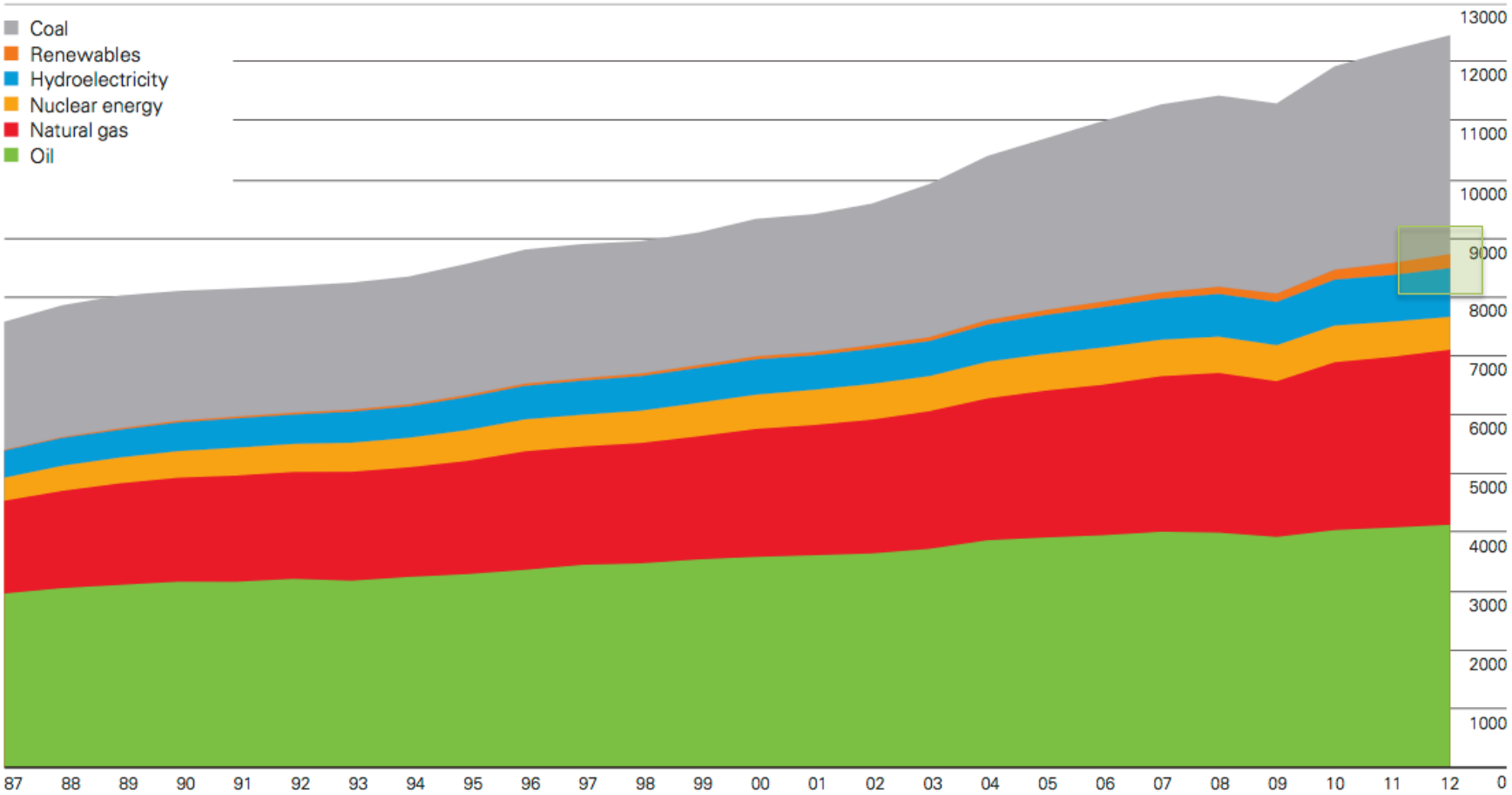
Consumer Energy Report

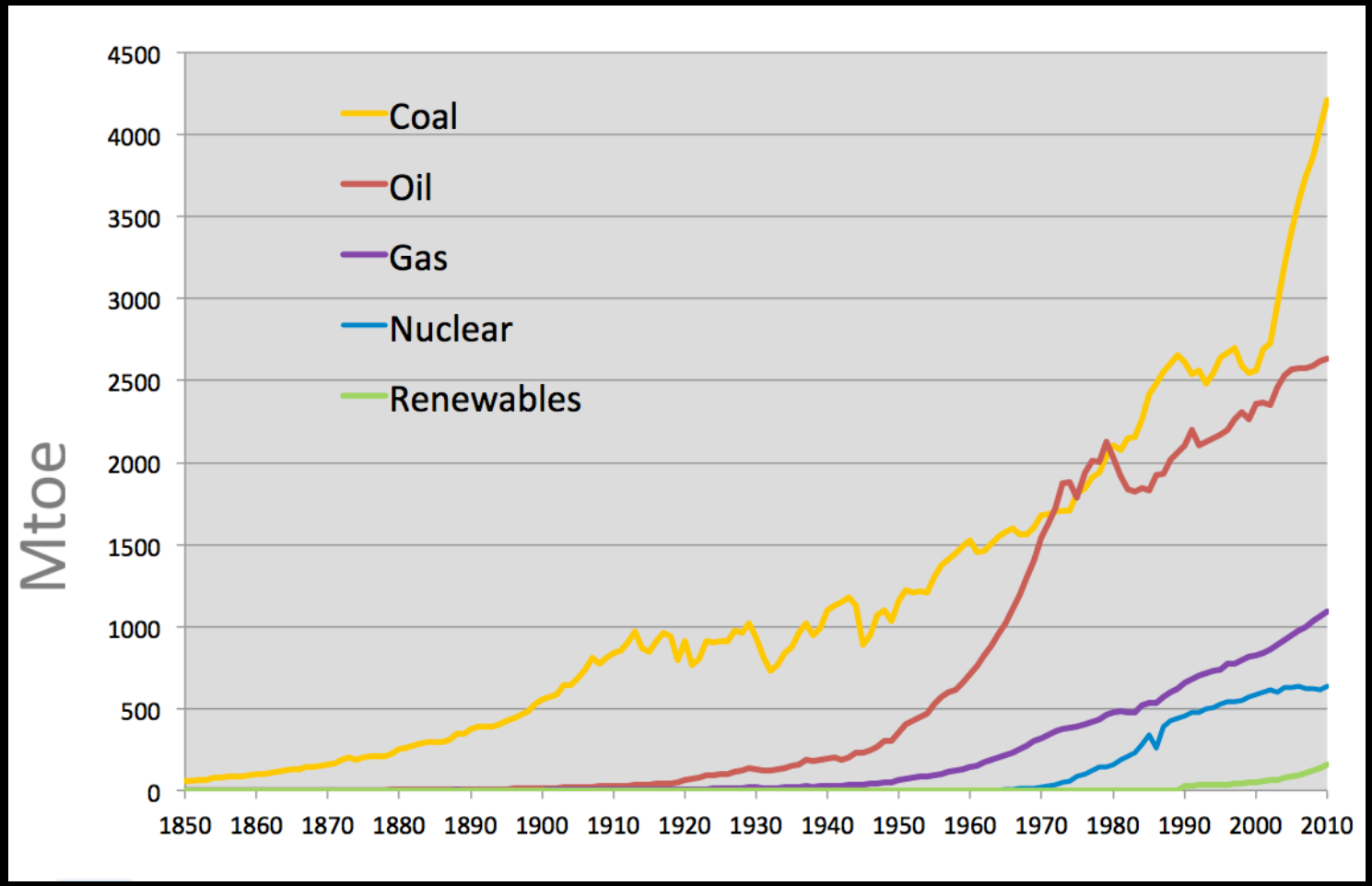
World consumption

Million tonnes oil equivalent

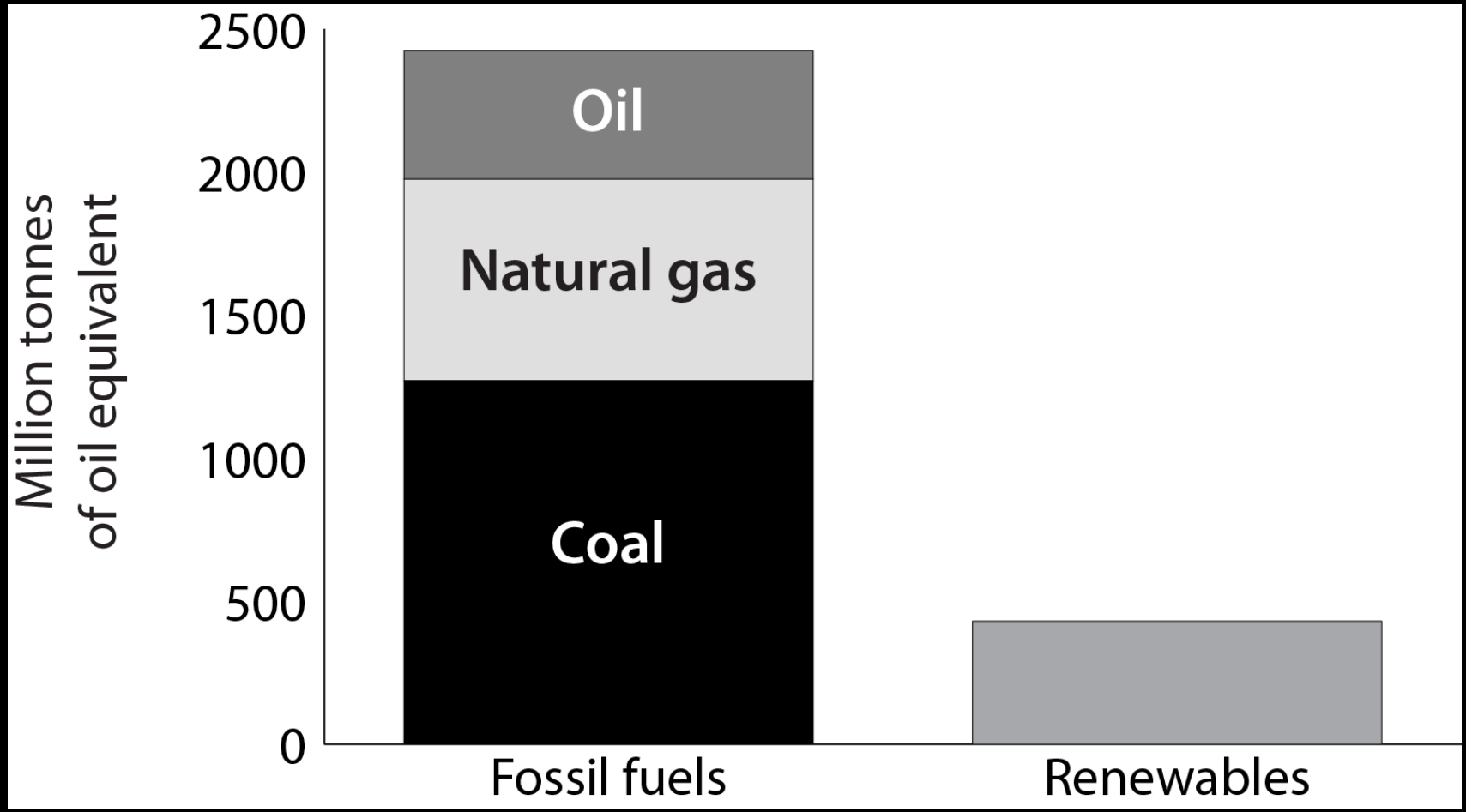


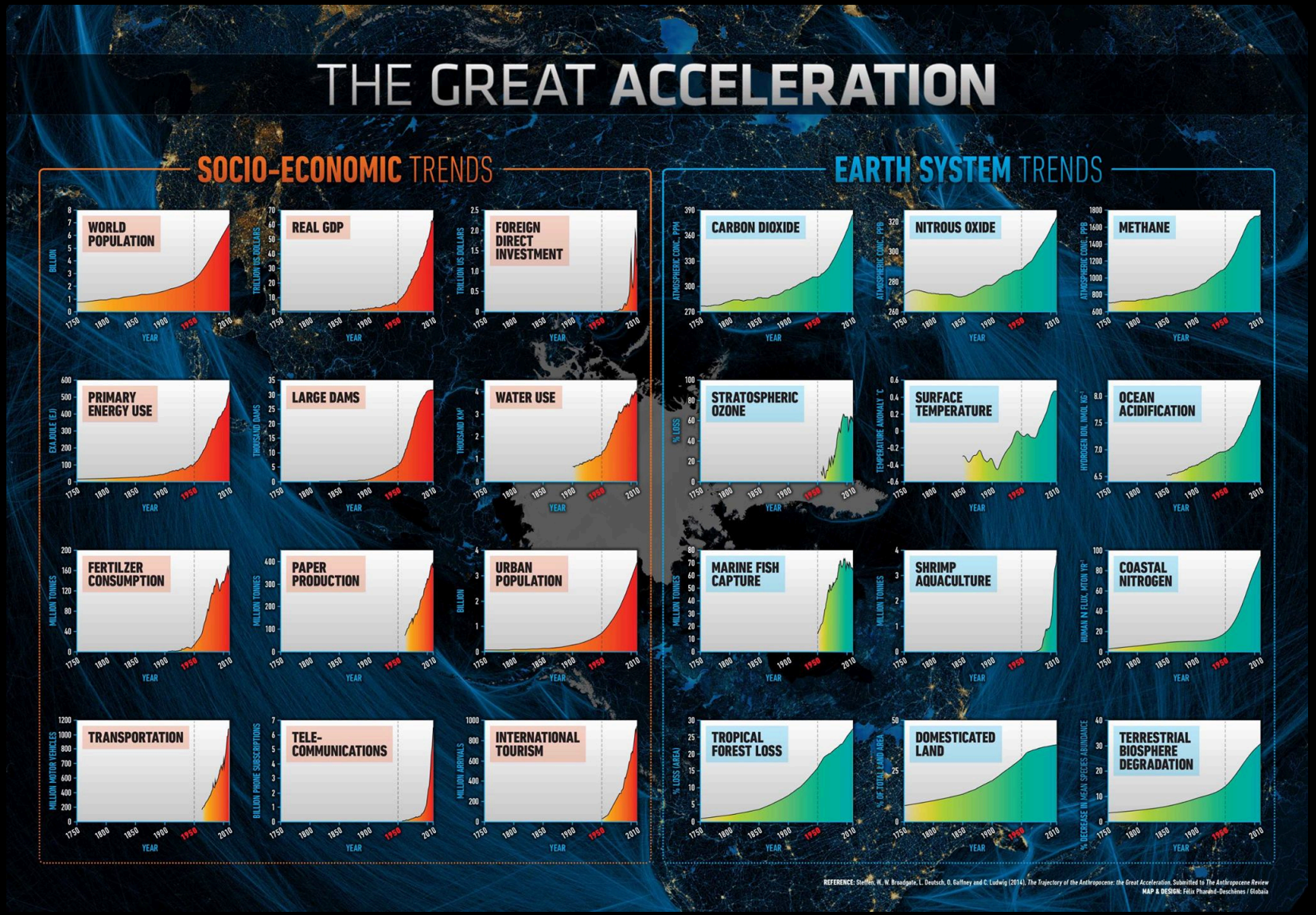
World primary energy consumption grew by a below-average 1.8% in 2012. Growth was below average in all regions except Africa. Oil remains the world's leading fuel, accounting for 33.1% of global energy consumption, but this figure is the lowest share on record and oil has lost market share for 13 years in a row. Hydroelectric output and other renewables in power generation both reached record shares of global primary energy consumption (6.7% and 1.9%, respectively).

Endurnýjanlegir orkugjafar



Nýir orkugjafar 2000–2011



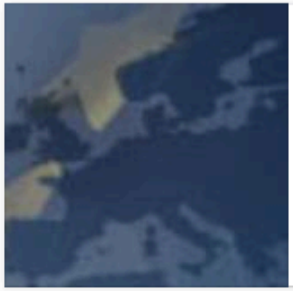

THE GREAT ACCELERATION
SOCIO-ECONOMIC TRENDS
WORLD POPULATION
BILLION
REAL GDP
TRILLION US DOLLARS
FOREIGN DIRECT INVESTMENT
TRILLION US DOLLARS
PRIMARY ENERGY USE
EXA JOULE (EJ)
LARGE DAMS
THOUSAND DAMS
WATER USE
THOUSAND KM³
FERTILZER CONSUMPTION
MILLION TONNES
PAPER PRODUCTION
MILLION TONNES
URBAN POPULATION
BILLION
TRANSPORTATION
MILLION MOTOR VEHICLES
TELE-COMMUNICATIONS
BILLION PHONE SUBSCRIPTIONS
INTERNATIONAL TOURISM
MILLION ARRIVALS
YEAR
EARTH SYSTEM TRENDS
CARBON DIOXIDE
ATMOSPHERIC CONC., PPM
NITROUS OXIDE
ATMOSPHERIC CONC., PPB
METHANE
ATMOSPHERIC CONC., PPB
STRATOSPHERIC OZONE
% LOSS
SURFACE TEMPERATURE
TEMPERATURE ANOMALY °C
OCEAN ACIDIFICATION
HYDROGEN ION, NMOL KG⁻¹
MARINE FISH CAPTURE
MILLION TONNES
SHRIMP AQUACULTURE
MILLION TONNES
COASTAL NITROGEN
HUMAN N FLUX, MTON YR⁻¹
TROPICAL FOREST LOSS
% LOSS (AREA)
DOMESTICATED LAND
% OF TOTAL LAND AREA
TERRESTRIAL BIOSPHERE DEGRADATION
% DECREASE IN MEAN SPECIES ABUNDANCE
YEAR
REFERENCE: Steffen, W., W. Broadgate, L. Deutsch, O. Gaffney and C. Ludwig (2014), The Trajectory of the Anthropocene: the Great Acceleration. Submitted to The Anthropocene Review
MAP & DESIGN: Félix Pharand-Deschênes / Globaia

Getur Ísland hrifið okkur með sér?

Atvinnulífið og umhverfisverndarumræðan

Andri Snær Magnason
August 26 · Reykjavík ·

Fjórir milljarðar í beina aðstoð til PCC á Húsavík til að „skapa" 120 störf, samt næst ekki einu sinni að manna byggingu virkjunar sem spillir Þeistareykjum, þar er 30 manna flokkur frá Póllandi. Það á að bora heil jarðgöng fyrir fyrirtækið, skuldsetja sveitarfélagið og byggja höfn, og Landsnet er að leggja rándýra línu að Bakka - sem PCC greiðir ekki nema að litlu leyti, kostnaðurinn er borinn af almenningi og tjónið á náttúrufegurðinni við Bakka er að engu metið. Á síðustu árum hafa mörg þúsund störf orðið til vegna nýsköpunar og 7000 störf orðið til í ferðaþjónustu á Íslandi - en samt hafa menn varla tímt að byggja svo mikið sem salerni eða strengja band milli staura til að halda mönnum innan stíga. Fyrir fjóra milljarða - hefði ekki verið hægt að skapa 5 störf á 20 stöðum í okkar 190.000 manna vinnumarkaði? Er ekki kominn tími til að menn átti sig á því að stóriðjustefnan er dauð og gjaldþrota.



Ríkisaðstoð: Tæpra 4 milljarða króna fjárfestingaraðstoð til PCC samþykkt

Eftirlitsstofnun EFTA, ESA, samþykkti í dag ríkisaðstoð til fyrirtækisins PCC BakkiSilicon hf. vegna byggingar kísilmálmverksmiðju á Bakka við Húsavík.

EFTASURV.INT

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Like Comment Share

STUNDIN

ÁSKRIFT SKRÁ INN LEITA VALMYND

PISTILL

Virkjanir, samfélag og náttúra

Ólafur Páll Jónsson heimspekingur ræðir um virkjanir í samfélaginu í erindi sem hann hélt á afmælisþingi Landsvirkjunar.

Eru virkjanir afturkræfar? Ólafur Páll ræðir það meðal annars í grein sinni hvort hægt sé að gera virkjanir afturkræfar og bendir þá á það reisa virkjun sé félagsleg framkvæmd en einnig það að fjarlægja virkjun. Myndin sýnir álver Fjarðaáls í Reyðarfirði sem Kárahnjúkavirkjun var reist til að þjónusta. MYND: ALCOA

4. SEPTEMBER 2015, KL. 11:09

Like 49 Tweet 1

Ólafur Páll Jónsson
skrifar

Spurningin sem er til umræðu er ekki flókin: Eru virkjanamannvirki afturkræf? Og henni má svara með einföldum hætti, ýmist „Já" eða „Nei". Já, vegna þess að það er hægt, í einhverjum skilningi, að losa sig við virkjanir eins og önnur mannvirki. Nei, vegna þess að virkjanir skilja yfirleitt eftir sig óafmáanleg spor í náttúru og samfélagi. Ef við viljum svara spurningunni með ítarlegri hætti, þá sjáum fljótlega að málin flækjast og skoða verður virkjanir í senn sem efnisleg, félagsleg og vistfræðileg fyrirbæri sem hafa auk þess flókin fagurfræðileg áhrif á landslag og náttúru.

„Að reisa virkjun er félagsleg framkvæmd. Að fjarlægja virkjun er líka félagsleg framkvæmd."

Félagslegt samhengi

MEST LESIÐ

FRÉTTIR
Konan á Hverfisgötunni var „alltof ung"

FRÉTTIR
Sigmundur meinti ekki það sem hann sagði á leiðtogafundi Sameinuðu þjóðanna

FRÉTTIR
Fréttir um næturgest Biebers fjarlægðar

FRÉTTIR
Frambjóðendur Heimdallar fóru með rangt mál í fjölmiðlum

PISTILL
Byggðavandinn snýst nú um að halda fólki á

VISITORS THROUGH KEFLAVÍK AIRPORT

By Nationality				Increase/decrease (%)	
	2012	2013	2014	12/13	13/14
Canada	18,760	23,970	38,790	27.8	61.8
China	14,036	17,597	26,037	25.4	48.0
Denmark	40,906	43,119	48,237	5.4	11.9
Finland	13,684	13,799	15,415	0.8	11.7
France	41,570	48,313	58,293	16.2	20.7
Germany	65,179	75,814	85,915	16.3	13.3
Italy	13,841	16,213	19,870	17.1	22.6
Japan	10,343	12,363	13,340	19.5	7.9
Netherlands	21,305	22,820	26,222	7.1	14.9
Norway	51,534	52,707	53,647	2.3	1.8
Spain	15,278	17,017	20,932	11.4	23.0
Sweden	35,601	35,491	40,992	-0.3	15.5
Switzerland	12,838	14,307	19,315	11.4	35.0
UK	94,599	137,108	180,503	44.9	31.7
USA	95,026	119,712	152,104	26.0	27.1
Other	102,421	130,666	169,569	27.6	29.8
Total	**646,921**	**781,016**	**969,181**	**20.7**	**24.1**
By Market Area					
Nordic countries	141,725	145,116	158,291	2.4	9.1
UK	94,599	137,108	180,503	44.9	31.7
Central/S-Europe	170,011	194,484	230,547	14.4	18.5
N-America	113,786	143,682	190,894	26.3	32.9
Other	126,800	160,626	208,946	26.7	30.1
Total	**646,921**	**781,016**	**969,181**	**20.7**	**24.1**

Your flight:

From: Berlin (DE), BER to: Reykjavik (IS), KEF, Roundtrip, Economy Class, ca. 4,800 km, 1 traveler

CO_2 amount: 0.954 t

Your flight:

From: New York (US), JFK to: Reykjavik (IS), KEF, Roundtrip, Economy Class, ca. 8,300 km, 1 traveler

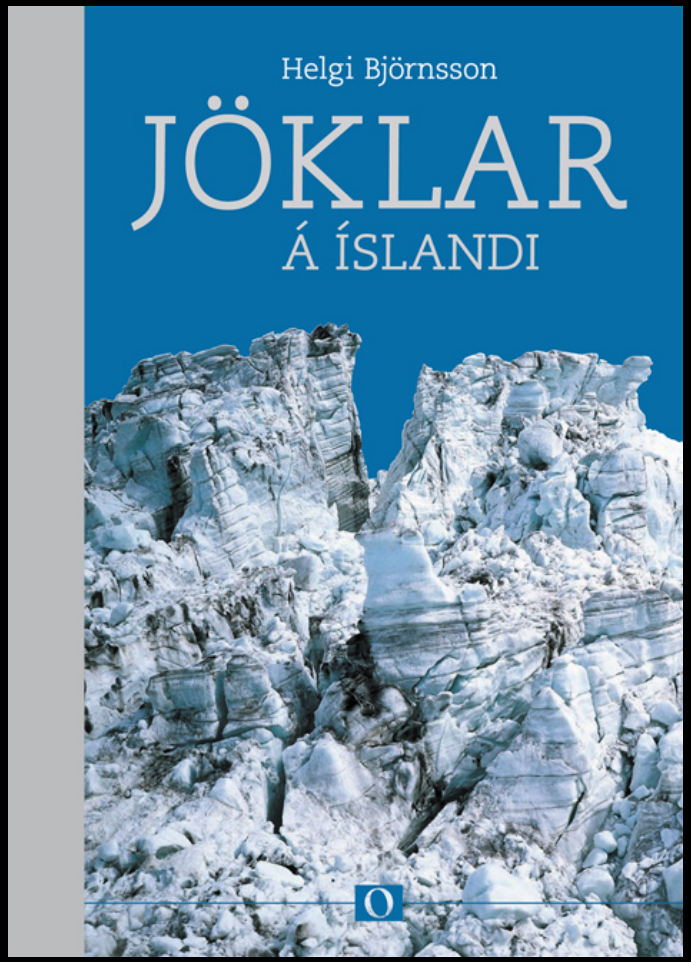
CO_2 amount: 1.558 t

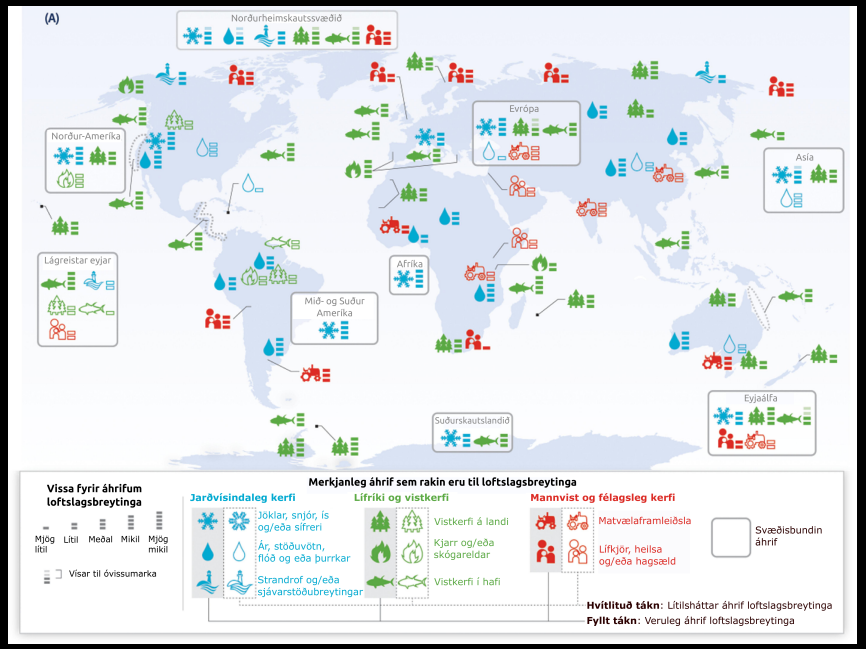
Your flight:

From: Beijing (CN), PEK to: Reykjavik (IS), KEF, Roundtrip, Economy Class, ca. 15,800 km, 1 traveler

CO_2 amount: 2.967 t

Hvað er verið að vernda?





Er hægt að koma á samræðu?